# SECTION II NAVIGATION PUBLICATIONS

#### SAILING DIRECTIONS CORRECTIONS

PUB 160 1 Ed 1998 LAST NM 11/01

Page 25—Lines 23 to 24/R; read:

of the moon, include Eid Al-Fitter (End of Ramadan), Eid Al-Adha (End of Pilgrimage), Hijrah (Islamic New

(PUBS 019/2001) 43/01

Page 26—Line 26/L; read:

naval authorities by INMARSAT (150 5612) or to Coalition naval vessels on VHF channel 13 or 16. Details of areas reported to be dangerous due to mines are also promulgated by Notice to Mariners issued by the Middle East Navigation Aids Service (MENAS) and by MARAD advisories.

(BA NP 286(3)) 43/01

Page 83—Lines 27 to 34/R; read:

IMB Piracy Reporting Center

ICC International Maritime Bureau

P.O. Box 12559

50782 Kuala Lumpur

Malaysia

Telephone: +60-3-2031-0014 Facsimile: +60-3-2078-5769 Telex: MA31880 IMBPCI E-mail: imbkl@icc-ccs.org.uk

#### **IMB Piracy Reporting Center Home Page**

http://www.iccwbo.org/ccs/menu\_imb\_piracy.asp

(PUBS 018/2001) 43/01

Page 84—Lines 26 to 27/R; read:

Vessels are advised not to anchor in the Strait of Malacca and Singapore Strait between the landward limit of the Traffic Separation Scheme or precautionary area and the adjacent port limits. Vessels are to anchor only in designated areas.

(Mly Annual Notice No. 11 of 2001;

PUBS 008/1999) 43/01

Page 86—Lines 23 to 24/L; read:

be reported to the naval authorities by INMARSAT (150 5612) or to Coalition naval vessels on VHF channel 13 or 16. Details of areas reported to be dangerous due to

(BA NP 286(3)) 43/01

Page 88—Line 19/L; read:

naval authorities by INMARSAT (150 5612) or to Coalition naval vessels on VHF channel 13 or 16. Details of areas reported to be dangerous due to mines are also promulgated by Notice to Mariners issued by the Middle East Navigation Aids Service (MENAS) and by MARAD advisories.

(BA NP 286(3)) 43/01

Page 88—Lines 48/L to 12/R; read:

All goods sent into Iraq under the Oil-for-Food program require a UN authorization letter. All goods sent legally into Iraq outside the Oil-for-Food program, with the exception of food and medicine, require a UN authorization letter.

Food and medicine are not subject to UN sanctions, and are not required to have a UN authorization letter unless they are being sent in under the Oil-for-Food program.

2. United Nations Security Council Resolution 986 and subsequent resolutions (the Oil-for-Food program).—The implementation of Oil-for-Food does not affect the mission of the Multinational Forces operating under the authority of UNSCR 661 (1990), UNSCR 665 (1990), and other relevant resolutions. The operating procedures set forth in this notice account for the requirements of UNSCR 986 and subsequent reolutions. Ships traversing the enforcement

(HYDROPAC 170/01, 171/01) 43/01

Page 89—Line 6/L; read:

within a 5-mile radius of 29°12'N, 49°20'E. Approaching (HYDROPAC 170/01, 171/01) 43/01

Page 89—Lines 55/L to 3/R; read:

661 or UNSCR 986 and subsequent resolutions. Refer to paragraph 1 above for specific authorization requirements.

4. Vessel pre-clearance.

a. Oil tankers inbound to the Mina Al-Bakr terminal pursuant to UN authorization under UNSCR 986 and subsequent resolutions will

(HYDROPAC 170/01, 171/01) 43/01

Page 89—Lines 19 to 20/R; read:

**5. Incomplete documentation.**—Vessels bound for Iraq which are determined to have

(HYDROPAC 170/01, 171/01) 43/01

Page 90—Lines 1 to 10/L; read:

8. **Merchant advisory updates.**—Vessels should contact the Commander, US Naval Forces Central Command, Maritime Interception Coordinator (N31CG), FPO AE 09501-6008 by telephone or facsimile, as follows:

Telephone: +973 724 839

+973 724 841

Facsimile: +973 724 344

+973 724 334

(HYDROPAC 170/01, 171/01)

43/01

Page 96—Lines 5 to 12/L; read:

Gulf and other areas. For further details, see Iraq—Regulations.

(NIMA) 43/01

Page 100—Line 7/L; read:

INMARSAT (150 5612) or to Coalition naval vessels on

#### PUB 160 (Continued)

VHF channel 13 or 16. Details of areas (BA NP 286(3))

43/01

Page 104—Lines 8 to 15/L; read:

**IMB Piracy Reporting Center** 

ICC International Maritime Bureau

P.O. Box 12559

50782 Kuala Lumpur

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Telephone: +60-3-2031-0014 Facsimile: +60-3-2078-5769 Telex: MA31880 IMBPCI E-mail: imbkl@icc-ccs.org.uk

### **IMB Piracy Reporting Center Home Page**

http://www.iccwbo.org/ccs/menu\_imb\_piracy.asp

(PUBS 018/2001)

43/01

Page 105—Lines 2 to 3/R; read:

Vessels are advised not to anchor in the Strait of Malacca and Singapore Strait between the landward limit of the Traffic Separation Scheme or precautionary area and the adjacent port limits. Vessels are to anchor only in designated areas.

(Mly Annual Notice No. 11 of 2001;

PUBS 008/1999) 43/01

Page 118—Line 3/R; read:

naval authorities by INMARSAT (150 5612) or to Coalition naval vessels on VHF channel 13 or 16. Details of areas reported to be dangerous due to mines are also promulgated by Notice to Mariners issued by the Middle East Navigation Aids Service (MENAS) and by MARAD advisories.

(BA NP 286(3)) 43/01

Page 119—Line 26/R to Page 120—Line 29/L; read:

Firing practice exercise areas are, as follows:

- 1. Area ALPHA (surface-to-surface and surface-to-air)—enclosed by the following:
  - a. 24°36'00"N, 66°47'50"E.
  - b. 24°47'36"N, 66°58'36"E.
  - c. 24°50'00"N, 66°40'00"E.

Safety height—2,483m.

- 2. Area BRAVO (surface-to-surface and surface-to-air)—enclosed by the following:
  - a. 24°19'00"N, 66°58'00"E.
  - b. 24°00'30"N, 66°39'00"E.
  - c. 24°11'00"N, 66°27'00"E.
  - d. 24°25'00"N, 66°42'00"E.

Safety height—6,096m.

- 3. Area ECHO (surface-to-surface and surface-to-air)—enclosed by the following:
  - a. 25°07'N, 66°30'E.
  - b. 25°07'N, 66°39'E.
  - c. 24°50'N, 66°30'E.
  - d. 24°50'N, 66°39'E.

Safety height—1,524m.

- 4. Area FOXTROT (air-to-air)—enclosed by the following:
  - a. 24°31′N, 67°01′E.
  - b. 24°36'N, 67°13'E.
  - c. 24°05'N, 67°22'E.
  - d. 24°02'N, 67°22'E.
- 5. Area H1 (surface live ammuntion)—enclosed by the following:
  - a. 24°36′N, 63°15′E.
  - b. 24°36'N, 62°30'E.
  - c. 24°21′N, 63°15′E.
  - d. 24°21'N, 62°30'E.

Safety height—6,800m.

- 6. Area H2 (surface live ammuntion)—enclosed by the following:
  - a. 24°36′N, 62°30′E.
  - b. 24°36'N, 61°45'E.
  - c. 24°21'N, 62°30'E.
  - d. 24°21'N, 61°45'E.

Safety height—6,800m.

- 7. Sonmiani Range (anti-aircraft live ammunition)—as follows:
  - a. Centered on 25°11'N, 66°45'E.
  - b. Arc of firing 220° to 310°.
  - c. Safety range—14,000m (7.7 miles within arc).
  - d. Safety height—10,000m.

(Pak Annual Notice No. 5 of 2001) 43/01

Page 120—Lines 13 to 20/R; read:

coast, W and SW of Ras Muari (Cape Monze), and is bounded by the following:

- a. 25°08'N, 66°30'E.
- b. 24°58'N, 66°30'E.
- c. 24°43'N, 66°42'E.
- d. 24°43'N, 66°56'E.
- e. 24°15′N, 67°05′E.
- f. 23°10'N, 67°05'E.
- g. 23°10′N, 62°10′E.
- h. 25°08'N, 62°10'E.

(Pak Annual Notice No. 5 of 2001) 43/01

Page 126—Line 3/L; read:

naval authorities by INMARSAT (150 5612) or to Coalition naval vessels on VHF channel 13 or 16. Details of areas reported to be dangerous due to mines are also promulgated by Notice to Mariners issued by the Middle East Navigation Aids Service (MENAS) and by MARAD advisories.

43/01

43/01

(BA NP 286(3))

Page 130—Line 3/L; read:

naval authorities by INMARSAT (150 5612) or to Coalition naval vessels on VHF channel 13 or 16. Details of areas reported to be dangerous due to mines are also promulgated by Notice to Mariners issued by the Middle East Navigation Aids Service (MENAS) and by MARAD advisories.

(BA NP 286(3))

#### PUB 160 (Continued)

Page 136—Lines 8 to 15/L; read:

**IMB Piracy Reporting Center** 

ICC International Maritime Bureau

P.O. Box 12559

50782 Kuala Lumpur

Malaysia

Telephone: +60-3-2031-0014 Facsimile: +60-3-2078-5769 Telex: MA31880 IMBPCI E-mail: imbkl@icc-ccs.org.uk

#### **IMB Piracy Reporting Center Home Page**

http://www.iccwbo.org/ccs/menu\_imb\_piracy.asp

(PUBS 018/2001) 43/01

Page 137—Line 44/R; insert after:

Vessels are advised not to anchor in the Strait of Malacca and Singapore Strait between the landward limit of the Traffic Separation Scheme or precautionary area and the adjacent port limits. Vessels are to anchor only in designated areas

(Mly Annual Notice No. 11 of 2001) 43/01

Page 165—Line 2/R; insert after:

Mined Areas 166 (NIMA) 43/01

Page 166—Line 8/L; insert after:

#### **Mined Areas**

Vessels are advised that mined areas exist in the N part of the Persian Gulf. Further information should be obtained from the local authorities. Mine sightings should be reported to the naval authorities by INMARSAT (150 5612) or to Coalition naval vessels on VHF channel 13 or 16. Details of areas reported to be dangerous due to mines are also promulgated by Notice to Mariners issued by the Middle East Navigation Aids Service (MENAS) and by MARAD advisories.

(BA NP 286(3)) 43/01

PUB 173 6 Ed 2000 LAST NM 29/00

Page 3—Line 5/L to Page 4—Line 25/R; read:

#### Ras Muari to Karachi

1.1 Ras Muari (Cape Monze) (24°50'N., 66°39'E.) is the W extremity of a sloping headland which rises to a pointed summit about 148m high, about 0.8 mile E of the headland. The Jhil Range, a ridge with a nearly level crest with several remarkable hummocks on it, extends about 10 miles NE of Ras Muari; the highest hummock, 234m high, lies about 3.5 miles E of Ras Muari. Ras Maura lies about 17 miles W of

the entrance to Karachi and is the most likely landfall for vessels approaching Karachi from W.

Ras Muari Light, shown from a concrete tower, 51m high and painted in horizontal white and black bands, is situated on the coast about 1 mile SE of Ras Muari.

There are ten major lights in the area covered by this sector. In addition to the light on Ras Muari, they are Manora Point, Khuddi, Jakhau, Chachhi, Navinal Point, Mandvi, Pirothan Island, Kalubhar Tapu, and Humani Point.

**Churma Island** (24°54′N., 66°36′E.), 179m high, lies about 4 miles NW of Ras Muari.

Beauchamp Reef, a narrow ridge of sand, gravel, and shell, with a least depth of 8m, extends about 3 miles NW from a position about 4 miles W of Ras Muari.

A spit, with depths of less than 18.3m, extends about 3.5 miles SW of Ras Muari Light. Nancowry Shoal, consisting of a series of sand, gravel, and coral ridges, with depths of less than 11m, lies on the inshore part of this spit. Two 10.5m patches lie on the spit, about 1.5 and 2.3 miles, respectively, SW of Ras Muari Light.

Caution.—A dangerous wreck is charted 27 miles S of Karachi.

A submarine exercise area extends up to 40 miles WNW, 50 miles SW, and 25 miles SSE of Ras Muari. Naval exercises take place S and W of Ras Muari.

The coast from Ras Muari to Buleji Point (Goth Jafar), about 9 miles E, is rocky and backed by the Jhil Range. It is low and sandy to Manora Point, about 8.5 miles farther ESE.

Caution.—Foul ground and shoal water, with depths of less than 9.1m, extend nearly 2 miles SSE of Buleji Point. Shoals, with depths of 9.1 to 10.3m, lie up to 2.8 miles S of the point.

A prohibited anchorage area, best seen on the chart, lies SW of Buleji Point.

Hawkes Bay, E of Buleji Point, has general depths of less than 5.5m. A rock, with depths of less than 1.8m, lies in the middle of the entrance to the bay.

A submarine cable is laid from Hawkes Bay, leading S, then WSW and W, passing about 4.5 miles S of Ras Muari.

Manora Point (24°47'N., 66°59'E.), forming the W side of the entrance to Karachi, is a perpendicular cliff at the SE end of a narrow hill, about 29m high. Manora Point Light is shown from a red circular tower with white bands, 38m high, about 0.3 mile NNW of Manora Point. The signal station for communicating with vessels outside the harbor is a conspicuous lattice tower, 42.5m high, about 91m WSW of the light structure. Manora Breakwater extends about 0.2 mile SSE from Manora Point.

A lighted buoy, moored off the edge of the coastal bank, about 3 miles SSE of Manora Point, marks the N edge of a spoil ground, and is on station from September to May. Its position is approximate, and it is liable to be washed away or withdrawn frequently.

#### PUB 173 (Continued)

## Karachi (24°47'N., 66°59'E.)

World Port Index No. 48600

**1.2** Karachi, the principal sea and rail terminal of Pakistan, is the gateway to the fertile regions of the interior. Karachi is the largest and leading industrial city of Pakistan. The harbor is divided into the Lower Harbor and the Upper Harbor, with the principal commercial facilities situated on both sides of the Upper Harbor.

**Winds—Weather.**—The Southwest Monsoon is characterized by high humidity and temperature, and strong winds. In addition to the rain, which generally reaches Karachi in the latter part of July, the Southwest Monsoon wind brings with it fine alluvial sand, which continuously blankets the city.

Fog or mist is common at dawn and dusk during the winter months.

The Northeast Monsoon is characterized by a relatively cool, dry, land breeze from the NE.

**Tides—Currents.—**The tidal rise at Karachi is 2.7m at MHHW and 2.4m at MLHW.

Tides at Karachi are semidiurnal and show a pronounced diurnal inequality at times, particularly at LW, occasionally falling below the level of the chart datum.

In the outer anchorage the flood current sets E, and the ebb current, which is scarcely perceptible, sets W.

The flood current sets E across the SE end of Manora Breakwater at a velocity of 2 knots, then into the channel and harbor toward the S end of W wharf, where it branches into both the Upper Harbor and Baba Channel. In the Upper Harbor it is strongest on the W side; its greatest velocity in the entrance is about 2 knots.

The ebb current sets down the channel until abreast the oil facilities on the E side of Lower Harbor, where it sets strongly toward the E side of the channel. Its greatest velocity is about 3 knots at springs.

On the incoming tidal currents, during the Southwest Monsoon, a considerable swell rolls into the Lower Harbor, making boat work at the Manora piers, which are located on the W side of the Lower Harbor NW of Manora Point, hazardous.

**Depths—Limitations.**—The depths in the port of Karachi are reduced to the chart datum measured from the lowest astronomical tide. Due to the varying depths at berths and silting in the channels, vessels with a draft exceeding 9.7m are not permitted to enter the port. The silting usually occurs during the Southwest Monsoon; therefore, dredging in the harbor is continuously in progress to maintain the charted depth as far as possible. Although the authorized maximum draft for vessels entering or leaving the port has been 9.8m, during the Southwest Monsoon this may increase or decrease at the discretion of the port officer according to the prevailing state and conditions.

The channel, from Lighted Buoy Fairway K to ENE of Manora Point, is dredged to a depth of 12.2m; and N of which, the Lower Harbor channel, with a dredged depth of 11.3m, stretches to a position 1.5 miles NE of Manora Point. Northward of this position, the rest of the Lower Harbor is

dredged to a depth of 9.1m on its E side and 8.2m on its W side.

The channel along the Upper Harbor is dredged to a depth of 9.1m; on the W bank are the naval dockyard and West Wharf, while on the E bank lies East Wharf. New Channel leads W of the naval dockyard and the West Wharf. It has a width of 106.7m and it is dredged to a depth of 7.6m.

Upon berthing, vessels are advised to let go an anchor in midstream to enable them to haul-off when leaving; however, attention should be had to unreliable holding ground for the anchor may drag when casting off.

Along E side of the Lower Harbor channel are four oil piers. Berthing information is given in the accompanying table. There is a turning basin abreast Berth OP-IV which has a dredged depth of 10.4m.

On the W side of the channel, between Bunker Island and Baba Pool, there are head and stern mooring berths to accommodate vessels up to 183m in length. LASH vessels up to 259m in length, with a maximum draft of 8.2m, berth abreast Bunker Island. Caution is necessary as many stranded and dangerous wrecks, best seen on the chart, lie in the vicinity of the mooring bouys between the LASH moorings and Baba Pool.

Berthing information for East Wharf, Juna Bundar Wharf, West Wharf, and the Lower Harbor oil facilities are given in the accompanying table.

The entire frontage of West Wharf S of Berth No. 24 is occupied by a shipyard for a distance of about 0.5 mile. From the S tip the frontage then leads about 1.25 miles NNE along the E bank of the New Channel, where numerous drydocks and slipways are situated. The largest drydock in Karachi is situated in this area. It is 189m long and 27.4m wide, with a sill depth of 5.5m; vessels up to 26,000 dwt can be accommodated. The berths along the E and W banks of the shipyard and the drydocks are dredged to a depth of 6.7m.

Page 4—Line 25/R; insert after:

New table titled **Karachi Berthing Facilities** from back of this Subsection.

Page 4—Line 26/R to Page 5—Line 3/R; read:

**Aspect.**—The Lower Harbor is that portion of the harbor between the entrance and the S end of East Wharf. Kiamari Groin forms the NE side of the Lower Harbor. The oiling pier lies in the NE part of the outer harbor. Extensive oil storage installations in the vicinity of the oiling pier are visible from a considerable distance.

The Upper Harbor is formed between East Wharf on its E side and West Wharf on its W side. Kiamari, a small town built on a sand ridge, lies E of the S part of East Wharf.

The new part of Karachi, at the head of the Upper Harbor, contains many fine buildings, while that part closest to the harbor is closely-built and crowded.

When approaching Karachi from S and passing the Indus Delta, the landmarks are not good. Land is not generally seen before sighting Manora Point. During the Southwest

#### **PUB 173 (Continued)**

Monsoon, this approach is particularly hazardous. There is a continuous haze and overcast during this season, making the determination of the ship's position difficult. From the W, Ras Muari makes a good landfall.

Several groups of large square buildings are distinguishable at Clifton, situated on some low sandhills, about 3 miles E of Manora Point.

At night, the lights on East Wharf can be seen from some distance seaward, and care is necessary not to mistake them for navigational lights when approaching the port. Three conspicuous chimneys, one of which emits a flare, stand about 8 miles E of Manora Point.

Bara Andai, 28m high and marked by a light, lies about 1 mile ENE of Manora Point, and is the S islet of Oyster Rocks.

**Pilotage.**—Pilotage is compulsory for merchant vessels of over 200 nrt. Pilots board incoming vessels by day or night in the vicinity of Lighted Buoy Fairway K. Pilots are requested by VHF. If, due to bad weather, the pilot boat cannot come out, the Manora Point Light signal station will advise the vessel of this.

A vessel, while awaiting the pilot, should heave-to, head to wind and sea, and on the approach of the pilot boat, bring the wind and sea on the port quarter, lowering an accommodation ladder on the lee side.

**Regulations.**—Ships should contact Manora Pilot Control when within range.

Vessels should send their ETA and arrival draft to the port, via their agent, 48 hours in advance.

Inbound vessels should maintain a listening watch on VHF channel 12 when the pilot boards. Outbound vessels should maintain a listening watch on VHF channel 12 from 30 minutes prior to departure until when outside the port limits.

When arriving at the anchorage, the following information should be reported:

- 1. Time of arrival.
- 2. Vessel's name and flag.
- 3. Cargo.
- 4. Position.

Vessels with their bridge structure located aft and having a length greater than 170m must arrive, sail, and shift berth during daylight hours only.

The following vessels may navigate in the harbor only between LW and 1 hour before HW:

- 1. Cargo vessels greater than 288m long.
- 2. Tankers greater that 259m long berthing at OP-I and OP-IV.

It has been reported (1995) that vessels are not allowed to depart the harbor on the ebb current.

**Signals.**—The signal station for communicating with vessels outside the harbor is the tower WSW of Manora Point Light. This tower, which is manned continuously, will flash the Morse Code Letter "U" if a vessel appears to be lying into danger.

Storm signals, using the General System, are displayed from the Manora Point Light signal station and from the N entrance of Boat Basin, about 1.5 miles N of the Manora Point Light signal station. Further information on these storm signals may be found in Pub. 160, Sailing Directions

(Planning Guide) South Atlantic Ocean and Indian Ocean under "India—Signals."

**Anchorage.**— Anchoring is prohibited within the area, best seen on the charts, which extends 5 miles SW from Manora Breakwater. Anchorage is also prohibited within an area, best seen on the chart, extending about 2 miles SSW from a position about 1.5 miles NW of Manora Point.

From September to May, ships can anchor off Karachi outside the charted prohibited anchorage areas, as convenient according to draft; ships are recommended not to anchor in depths less than 9m and during April and May, they should anchor farther offshore in depths not less than 12m.

Vessels should not anchor off Karachi during the Southwest Monsoon, as several vessels have lost anchors and cables while attempting to do so.

Vessels having had more than two cases of dangerous infectious diseases aboard, or in which more than two deaths have occurred during the 12 days prior to their arrival at Karachi, must anchor in the quarantine anchorage, best seen on the chart, at the entrance to the harbor. Vessels in quarantine may enter the harbor during daylight hours only.

**Directions.**—The best approach is with Manora Point Light bearing about 040° until Lighted Buoy Fairway K is sighted and closed; then bring the leading lights in line as mentioned below. It is dangerous to proceed within 2 miles of the harbor entrance, and under no circumstance should a vessel attempt to enter the harbor without a pilot. The lighthouse should not be brought to bear less than 030° due to the heavy rollers and swell on the edge of the flats.

The approach channel to the harbor entrance is marked by a lighted range, shown from metal framed beacons situated S of Bara Andai Island. The channel is marked on either side by lighted buoys.

The best time to enter Karachi is on the first or last of the flood tidal current. A vessel should swing to an anchor, and berth with her head S. When berthing during the Southwest Monsoon, it is advisable to drop an anchor in midstream to assist in hauling off.

When leaving the harbor the pilot disembarks at the harbor entrance. Vessels should then steer through the buoyed channel on course 220° until Lighted Buoy Fairway K is passed clear. However, as stated previously, Manora Point Light should not be brought to bear less than 030°.

**Caution.**—No vessel should proceed within 2 miles of the harbor entrance without local knowledge. Vessels should not attempt to enter the harbor without a pilot.

Several vessels approaching Karachi from S have grounded on the banks off the Indus Delta through failure to sound, and for not making due allowance for the SE set.

Dangey Patches, rocky heads with a least depth of 10.4m, lie about 1.5 miles WSW of Manora Point. Three dangerous wrecks lie within the red sector of Bari Andai Light, about 3 miles S, 5.8 miles S, and 4.3 miles SSE, respectively, of Bara Andai Island.

There are dangerous or stranded wrecks which lie within 1, 6, and 9 miles SW of Manora Point Light. Other dangerous wrecks lies 2.5 and 4.8 miles WSW, and 5 miles

#### **PUB 173 (Continued)**

W of Manora Point Light. These dangerous wrecks may not be marked by buoys.

(PUBS 016/2001) 43/01

Page 5—Lines 4 to 32/R; read:

## **Approach to Port Muhammad Bin Qasim**

**1.3 Phitti Creek** (24°40'N., 67°09'E.) is entered 11 miles SE of Manora Point, between Buddo Island, which is low and sandy, and Zulfiquar Bank, which dries 0.6m. A tower, with an elevation of 24m, lies close NE of the SE extremity of Buddo Island.

Surveyor's Sand is a drying patch with its SW extremity lying 1.5 miles SW of Buddo Island. Range lights lead through the outer part of Ahsan Channel. The rear range light stands off the SE end of Surveyor's Sand.

Phitti Creek is approached by Ahsan Channel, which leads through the shallow flat fronting the entrance. This entrance is marked by Fairway Lighted Buoy, moored 7.5 miles SSW of the rear range light on Surveyor's Sand. The outer anchorage area is centered about 2 miles W of Fairway Lighted Buoy. The least depth in the anchorage is 17m, with good holding ground, mud and sand. There are waiting areas on the E side of the channel SW and N of Zulfiquar Bank.

Bundal Island (Bondal Island), composed of sand dunes, lies N of Buddo Island. There are several mooring buoys in the channel E of Bundal Island. There is a prominent building on the E side of Bundal Island, 0.8 miles N of its S extremity; a beacon stands on the NE point of the island.

Anchorage.—Anchorage, in 16 to 20m, good holding ground, sand and mud, can be obtained in the Outer Anchorage Area, close W of Fairway Lighted Buoy. The limits of the anchorage area can best be seen on the chart. During the heavy swells of the Southwest Monsoon, vessels should anchor near the W end of the anchorage area and pay out extra cable.

**Caution.**—During the Southwest Monsoon, a heavy swell is also encountered in Ahsan Channel. During this period, suspended dust in the air also results in reduced visibility. Fog or mist may also be encountered during the winter months at dusk and at dawn.

(PUBS 017/2001) 43/01

Page 6—Lines 1/L to 9/R; read:

# Port Muhammad Bin Qasim (24°46'N., 67°20'E.)

World Port Index No. 48605

**1.4** Port Muhammad Bin Qasim is situated in Phitti Creek, 27 miles SE from the center of Karachi. A newly-constructed port, it is capable of handling vessels of up to 50,000 dwt, and 200m in length with a draft of 12.6m.

**Tides—Currents.—**The spring tidal current of 3 knots on the flood and 5 knots on the ebb are normal in Phitti Creek and vessels should proceed with caution, especially in

passing the dredges. Except in the entrance channel, the current mostly follows the direction of the creek.

**Depths—Limitations.**—Access to the port is through a 24-mile long channel, beginning with Ahsan Channel. Ahsan Channel is approximately 9 miles long, has been dredged to 12.4m, and is well-marked. From the vicinity of Buddo Island and Zulfiquar Bank, the channel continues through Phitti Creek and Kadiro Creek, both maintained at 11.3m, to a turning basin off the Iron Ore and Coal Jetty, a distance of 13 miles. From this jetty, the channel traverses Gharo Creek, maintained at a depth of 10m, to the Marginal Wharf, 2 miles farther up the creek.

The turning basin off the Iron Ore and Coal Jetty is maintained to a depth of 12.8m. The turning basin off the Marginal Wharf is maintained to a depth of 10.0m.

The width of the channel ranges from 185 to 280m in the approach, and from 145 to 250m in the reach channel. The turning basins are 370m and 450m in diameter.

Dredging of the channel is continuous, but silting is liable to occur, particularly during the Southwest Monsoon. Buoys are liable to drag and are moved frequently to mark the best channel.

The Fauji Oil Terminal has a 46m long main platform. Dolphins extend the berthing length to 250m. There is a maintained depth of 11.3m alongside. Vessels between 25,000 dwt and 75,000 dwt can be accommodated, but in 1995 vessels were limited to a maximum length of 225m, a maximum beam of 32.2m, and a maximum draft of 10m (10.5m with special permission).

The Iron Ore and Coal Jetty, 1 mile ESE of the Fauji Oil Terminal, handles bulk carriers serving a steel mill; it is 270m long. The jetty is connected to the steel mill by a trestle and a conveyor. Vessels of 50,000 dwt can be accommodated, although it is planned to increase the capacity to 100,000 dwt. Berthing limitations are given in the accompanying table.

Maximum Vessel Dimensions Iron Ore and Coal Jetty											
	Monsoon season (May to September)	Non-monsoon season (September to May)									
Length	201m	225m									
Draft	10.5m	9.5-10.5m									
Beam	25.3	25.3m									

**Note.**—All berthing limitations are subject to change. Updated information can be obtained from the Pakistan Notice to Mariners or the local port authorities.

There are seven berths at the Marginal Wharf. Each berth is 200m long, with limiting dimensions, as follows:

Berthing Limitations—Marginal Wharf												
Berth	Maximum vessel:											
Derth	Size	Length	Draft	Beam								
1	_	183m	9.5m	25m								
2	25,000 dwt	183m	10.0m	25m								
3	25,000 dwt	183m	25m									

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Berthing Limitations—Marginal Wharf												
Berth	Maximum vessel:											
Deren	Size	Length	Draft	Beam								
4	25,000 dwt	183m	10.0m	25m								
5	25,000 dwt	183m	10.0m	25m								
6	35,000 dwt	183m	25m									
7	35,000 dwt	183m	11.0m	25m								

**Note.**—All berthing limitations are subject to change. Updated information can be obtained from the Pakistan Notice to Mariners or the local port authorities.

**Pilotage.**—Pilotage is compulsory and is available during daylight hours only. Pilots board in the vicinity of Fairway Lighted Buoy. In bad weather, the pilot may board in the waiting are or in the channel abreast the SE end of Bundal Island. The pilot boat is gray-hulled with a white superstructure.

Deep-draft vesels are normally boarded by the pilot about 2.5 hours prior to HW, in order to assure the vessels berth at HW.

**Regulations.**—The vessel's ETA is required 48 hours and 24 hours in advance; messages are to be sent through Karachi (ASK). The vessel's arrival draft should be forwarded at this time, as the maximum allowable draft varies. Contact with Port Qasim Control via VHF channel 16 is required 12 hours prior to arrival.

The ETA message should contain the following information:

- 1. Vessel name and flag.
- 2. Net registered tonnage.
- 3. Gross registered tonnage.
- 4. Length overall.
- 5. Draft.
- 6. Loading/discharging information.

**Caution.**—Night navigation is restricted due to vandalism of the lighted aids to navigation.

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Page 6—Lines 10 to 56/R; read:

#### The Indus Delta—Phitti Creek to Khori Creek

**Winds—Weather.**—The climate of the Indus Delta is hot in the summer, cool in the winter, and unhealthy during the floods, which normally occur from June to September.

**Tides—Currents.**—The cuurents in the Indus Delta tend to be variable, but the sets of the cuurents do tend to parallel the coast.

Farther off the delta, the currents have a season variation that is related to the monsoons, as follows:

- 1. February to September—The set is usually SE, with the strongest consistancy occuring from June to August.
  - 2. October—The currents are variable.
  - 3. November to January—The set is usually NW.

The rate of the current is usually less than 1 knot, but a rate of as much as 2 knots can occur, usually from June through August and in December.

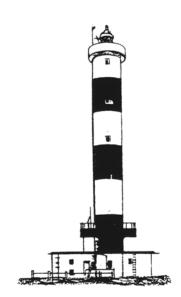
Tidal currents at the mouths of the Indus Delta are strong, and can attain the following rates at ebb:

- 1. Phitti Creek (24°40'N., 67°09'E.)—3 knots.
- 2. Dabba Creek (24°19'N., 67°16'E.)—3 knots.
- 3. Turshian Creek (24°03'N., 67°23'E.)—5 knots.
- 4. Sir Creek (23°38'N., 68°02'E.)—4 knots.

**Aspect.**—The Indus Delta extends about 115 miles SE from Karachi to Khori Creek. The delta is low and flat throughout, and is partially flooded at HW to a considerable distance inland. It is destitute of trees and shrubs, with the exception of a little jungle, and nothing is seen for many miles but swamp. The land is scarcely discernible at more than 2 miles offshore, except where bushes exist, which can be seen at LW at a distance of 5 or 6 miles.

A narrow strip of sandhills generally fronts this coast, which is backed by mangrove swamps and fronted by drying sandbanks. During the heat of the day, and especially during the dry season when the wind blows off the land, a heavy dust-haze hangs low over the coast, making the coastal features unrecognizable, even from a short distance to seaward.

**Khuddi Creek** (24°36'N., 67°12'E.) is fronted by a bar with a depth of 2.4m; within the bar a 1 mile wide channel, with depths from 4 to 11m, leads between low sandy islands on either side of the entrance. A light shown from a round tower, with black and white bands, on the S side of the creek.



Khuddi Island Light

**Caution.**—It is difficult to identify the different mouths of the Indus River on a coast so devoid of landmarks and at times partially submerged. Beacons marking the mouths have long since collapsed or disappeared, owing to the constantly changing coastline; a few beacons remain.

Vessels navigating along this coast should remain in depths over 18m, as the depths shoal abruptly in places, especially in the vicinity of The Swatch. It is dangerous for a deep-draft vessel to approach the Indus Delta, as the breakers on the shelving coastal banks, which extend many miles

#### PUB 173 (Continued)

offshore, are often seen before the coast is sighted; this is especially so during the Southwest Monsoon, when visibility is poor and the sea breaks in depths of 5.5m or more. The discoloration of the water is very marked, especially off the main fresh water mouths on the ebb tidal current, when during spring tides it extends more than 10 miles offshore.

Heavy tide rips are common off the mouths of the Indus Delta, especially during springs.

**Off-lying features.—Sir Creek** (Sir River) (23°38'N., 68°02'E.) enters the sea about 100 miles SE of Karachi and is the approximate boundary between India and Pakistan.

The Swatch is a remarkable submarine valley, from about 3 to 8 miles wide, extending about 52 miles SSW from approximately 23°40'N., 67°27'E. The Swatch has depths of less than 183m on either side of it, and with depths exceeding 1,097m at its SW end. It is almost regular in shape and has steep sides and a flat sloping bottom. The bottom and sides of The Swatch consist of soft, gray mud, with some sand and gravel on its NW edge.

The Swatch can be of great assistance to vessels approaching Karachi from S. An echo sounder trace of maximum depths can help provide a clear indication of the vessel's position, especially during the poor visibility and the strong sets of the Southwest Monsoon.

Khori Great Bank is an extension of the coastal bank SW from the coast between The Swatch and Khori Creek. This bank has depths of 20.1 to 33m and extends as much as 60 miles offshore.

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Page IV—Lines 1 to 33/R; read:

- 9. Grant and Tracey's Lighthouse Page (Grant and Tracey Maizels):
  - \* Bathurst Point Light—paragraph 5.29
  - \* Robe Light—paragraph 8.49

\* Cape Martin Light—paragraph 8.51

\* Penguin Islet—paragraph 8.52

\* Cape Banks Light—paragraph 8.55

\* Cape Northumberland Light—paragraph 8.55 http://www.maizels.nu/lights

10. Lighthouses of Australia (Malcolm Macdonald) http://www.lighthouse.net.au/lights

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The following photographers in this website have given permission to use photographs in this book:

\*Robert Cook: robcook@melbpc.org.au Cape Willoughby Light—paragraph 8.10

\*Peter Coombs: petensha@alphalink.com.au Cape Borda Light—paragraph 8.2

\*Ed Kavaliunas: edkav@pipeline.com.au Troubridge Island Light—paragraph 8.26

\* Sophia M. McHarney:

Bathurst Point Light—paragraph 5.29

clmshem@goldsboro.net

- 11. Lighthouses of Western Australia (Pauline and John O'Brien):
  - \* North Mole Light—paragraph 5.33
  - \* South Mole Light—paragraph 5.33
  - \* Woodman Point Light—paragraph 5.33 http://bajoran.upnaway.com/~obees/lights

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# WORLD PORT INDEX CORRECTIONS

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## **EVEN PAGE CORRECTIONS**

INDEX NUMBER	PORT	COUNTRY CODE	LATITUDE	LONGITUDE	PUBLICATION	CHART	HARBOR SIZE	HARBOR TYPE	SHELTER	TIDE	SWELL	ICE RESTRICTIONS	OTHER J OVERHEAD LIMITS	CHANNEL	ANCHORAGE	CARGO PIER	OIL TERMINAL	TIDE	MAX SIZE VESSEL	GOOD HOLDING GROUND	TURNING AREA	
48310	AL MANAMAH HARBOR	ВА	2614N	05035E	172	62412	s	CN	F	Υ			Υ	M	L *	*	*	05	L			43/01
48320	SITRAH	ВА	2610N	05041E	172	62453	S	CN	F	Y *	N	N	Υ	Н	E *	J *	K	05	L		Y *	43/01
48325	MINA SULMAN	ВА	2612N *	05037E *	172	62453	S	CN	F	Υ	N	N	ΥN	K *	E *	J	*	08	L		Y *	43/01
48338	JUBAIL	SA	2703N *	04942E *	172	62429	М	CB *	F	N	N	N	N	Α	A	F *	Α		L			43/01
48340	RAS AT TANNURAH	SA	2638N	05010E	172	62416	М	OR	F	N	N	N	Υ	C *	A *	G	A *	05	L	N	Y *	43/01
48343	JUAYMAH OIL TERMINAL	SA	2656N *	05004E *	172	62415	S	OR	F	N	N	N	Y *	С	Α	B *	Α	05	L			43/01
48346	RAS AL KHAFJI	SA	2826N	04835E	172	62448	s	OR	F	Υ			Υ	F	C *	N	C *	04	L			43/01

## **ODD PAGE CORRECTIONS**

INDEX NUMBER	1ST PORT OF ENTRY U.S. REPRESENTATIVE ETA MESSAGE	COMPULSORY AVAILABLE LOCAL ASSIST ADVISABLE	TUGS SALVAGE TUGS ASSIST	PRATIQUE  DERATT CERT  QUARANTINE  OTHER	TELEGRAPH RADIO RADIO RADIO TEL AIR RAIL	WHARVES ANCHOR MED MOOR BEACH MOOR ICE MOOR	MEDICAL FACILITIES GARBAGE DISPOSAL DEGAUSS DIRTY BALLAST	FIXED  MOBILE FLOATING  FLOATING	100 TONS PLUS 50 - 100 TONS 25 - 49 TONS 0 - 24 TONS	LONGSHORE ELECT STEAM STEAM NAVIGEQUIP ELECT REPAIR	PROVISIONS WATER FUEL OIL DIESEL OIL DECK ENGINE	REPAIR DRYDOCK RAILWAY
48310	Y Y *	Y Y Y	*	Υ	YYYYY	YY	Υ	* *	* * *		YYYY	N * 43/01
48320	Y Y Y * *	YYY	Y * *	Y Y *	Y Y Y Y Y *	YY	Y Y	Y Y Y *	Y Y Y	Y *	YYYY	A L * * 43/01
48325	Y Y Y * *	YYY	Υ	Y Y * *	Y Y Y Y Y Y *	Y *	Y N	ΥΥ	* *	Y Y Y * *	Y Y Y Y Y Y * *	C M 43/01
48338	N Y Y	YY	* Y	Y *	Y	Υ	Y Y N	Y Y Y *	Y Y Y Y * *	Υ	Y Y Y Y * *	C 43/01
48340	YYY	Y Y Y Y	N Y *	Υ	YYYY	YY	YN N	ΥΥ	Y Y		Y N Y Y	C 43/01
48343	ΥΥ	Y Y Y Y *	N Y *	Υ	Y *	Υ	N				N Y Y	N * 43/01
48346	YNY	Y Y Y	Υ	Υ	ΥΥ	Υ	Y N			Υ	YNYY	N * 43/01

Karachi Berthing Facilities										
Berth	Length	Depth	Remarks							
		EAST WH	ARF							
Merewether Wharf										
Berth No. 1	153m	9.1m	Containers.							
Berth No. 2	152m	9.1m	Containers.							
Berth No. 3	167m	9.1m	Containers.							
Berth No. 4	152m	9.1m	Containers.							
Erskine Wharf		!								
Berth No. 5	149m	8.5m								
Berth No. 6	167m	8.5m								
Berth No. 7	147m	8.5m								
Berth No. 8	167m	9.5m								
James Wharf										
Berth No. 9	147m	10.4m	Bulk cargo.							
Berth No. 10	147m	10.4m	Bulk cargo.							
Berth No. 11	167m	10.4m	Bulk cargo.							
Giles Wharf										
Berth No. 12	147m	10.4m	Bulk cargo.							
Berth No. 13	167m	10.4m	Bulk cargo.							
Berth No. 14	147m	10.4m								
Younghusband Wharf										
Berth No. 15	147m	10.4m	Containers and ro-ro.							
Berth No. 16	167m	10.4m	Containers and ro-ro. Vessels with a length of 275m and over.							
Berth No. 17	147m	10.4m	Containers, ro-ro, snd grain discharge. Vessels with a length of 275m and over.							
Berth No. 17A	36m	3.0m	Lighterage.							
Napier Mole Ship Repair	Berths									
Berth No. 1	79m	7.3m								
Berth No. 2	79m	7.3m								
	JUN	IA BUNDAR	WHARF							
Berth No. 25	149m	9.1m								
Berth No. 26	164m	9.1m								
Berth No. 27	164m	9.1m								
Berth No. 28	168m	9.1m								
WEST WHARF										
Berth No. 18A	374m	7.3m	Lighterage.							
Berth No. 18	167m	9.7m								
Berth No. 19	167m	9.7m								
Berth No. 20	182m	9.7m								
Berth No. 21	190m	9.7m								
Berth No. 22	182m	11.6m	Containers.							
Berth No. 23	213m	11.6m	Containers.							
Berth No. 24	152m	11.0m	Containers and ro-ro.							

	Karachi Berthing Facilities										
Berth	erth Length Depth Remarks										
Berth No. 24A	37m	5.5m	Lighterage.								
	LOWER I	HARBOR OI	L FACILITIES								
Berth OP-I	196m	11.3m	Vessels up to 35,000 dwt and:  1. A maximum length of 229m.  2. A maximum beam of 30.5m.  3. A maximum draft of 10.67m.								
Berth OP-IV	305m	13.4m	Vessels up to 75,000 dwt and: 1. A maximum length of 259m. 2. A maximum beam of 39.6m. 3. A maximum draft of 11.89m.								
Berth OP-V	322m	_	Vessels up to 75,000 dwt and:  1. A maximum length of 259m.  2. A maximum beam of 39.6m.  3. A maximum draft of 11.89m.  Note.—This facility is located in the charted position of Berth OP-II and Berth OP-III.								

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